## **CLAIMS**

1. A therapeutic/preventive agent for cognitive dysfunctions, which comprises as an active ingredient an imide derivative of the formula [1]:

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 $\{$ wherein Z is a group of the formula [2]:

$$\begin{array}{c|c}
R^{1} & (CH_{2})_{n} \longrightarrow & \\
R^{2} & & N \longrightarrow \\
R^{3} & & R^{4}
\end{array}$$
[2]

(in which B is a carbonyl or a sulfonyl; R¹ R², R³ and R⁴ are independently
a hydrogen atom or a lower alkyl, provided that R¹ and R², or R¹ and R³
may combine each other to form a hydrocarbon ring, or R¹ and R³ may
combine each other to form an aromatic hydrocarbon ring; said
hydrocarbon ring may optionally be cross-linked with a lower alkylene or
an oxygen atom; said lower alkylene and hydrocarbon ring may optionally
be substituted by at least one alkyl; and n is 0 or 1),

D is a group of the formula [3]:

$$--- (CH2)p --- A -- (CH2)q --- [3]$$

(in which A is a hydrocarbon ring optionally be cross-linked with a lower alkylene or an oxygen atom; said lower alkylene or said hydrocarbon ring may optionally be substituted by at least one alkyl; and p and q are independently 0, 1 or 2),

G is N, CH or COH, and -Ar is an aromatic heterocyclic group, an aromatic hydrocarbon group, benzoyl, phenoxy, or phenylthio, or G is a carbon atom, and -Ar is biphenylmethylidene,

where said aromatic heterocyclic group, aromatic hydrocarbon group,

benzoyl, phenoxy, phenylthio, and biphenylmethylidene may optionally be substituted by at least one group selected from a lower alkyl, a lower alkoxy and a halogen atom}, or an acid addition salt thereof.

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- 2. The therapeutic/preventive agent for cognitive dysfunctions according to claim 1, which is a therapeutic agent for senile dementia.
- 3. A therapeutic/preventive agent for cognitive dysfunctions, which comprises as an active ingredient the imide derivative as disclosed in claim 1, wherein -Ar is an aromatic heterobicyclic group, naphthyl, benzoyl, phenoxy or phenylthio, and G is N, CH or COH, or -Ar is biphenylmethylidene, and G is a carbon atom (said aromatic heterobicyclic group, naphthyl, benzoyl, phenoxy, phenylthio and biphenylmethylidene may optionally be substituted by at least one group selected from a lower alkyl, a lower alkoxy and a halogen atom), or an acid addition salt thereof.

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- 4. The therapeutic/preventive agent for cognitive dysfunctions according to claim 3, which is a therapeutic agent for senile dementia.
- 5. A therapeutic/preventive agent for cognitive dysfunctions, which comprises as an active ingredient the imide derivative as disclosed in claim 1, wherein -Ar is an aromatic heterocyclic group condensed with a benzene ring, or naphthyl, benzoyl, phenoxy or phenylthio (said aromatic heterocyclic group condensed with a benzene ring, naphthyl, benzoyl, phenoxy, and phenylthio may optionally be substituted by at least one group selected from a lower alkyl, a lower alkoxy and a halogen atom), and G is N, CH or COH, or an acid addition salt thereof.

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- 6. The therapeutic/preventive agent for cognitive dysfunctions according to claim 5, which is a therapeutic agent for senile dementia.
- 7. A therapeutic/preventive agent for cognitive dysfunctions, which comprises as an active ingredient the imide derivative as disclosed in claim 1, wherein Z is a group of the formula [4]:

in which -L- is a single bond or a double bond, E is a lower alkylene optionally substituted by a lower alkyl, or an oxygen atom, R<sup>5</sup> is a hydrogen atom or a lower alkyl, and B is the same as defined in claim 1; a group of the formula [5]:

in which -L-, E, R<sup>5</sup> and B are as defined above; a group of the formula [6]:

a group of the formula [7]:

in which R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup> are independently a hydrogen atom or a lower alkyl, or the adjacent two groups of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup> may combine each other to form a double bond, and B is as defined above;

$$\begin{array}{c|c}
R^{16} & & \\
R^{17} & & \\
\hline
R^{17} & & \\
\end{array}$$

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in which  $R^{16}$  and  $R^{17}$  are independently a hydrogen atom or a lower alkyl, or  $R^{16}$  and  $R^{17}$  may combine each other to form a saturated hydrocarbon ring, and  $R^{5}$  and B are as defined above; or

a group of the formula [8]:

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in which B is as defined above, or an acid addition salt thereof.

- 8. The therapeutic/preventive agent for cognitive dysfunctions according to claim 7, which is a therapeutic agent for senile dementia.
- 9. A therapeutic/preventive agent for cognitive dysfunctions, which comprises as an active ingredient the imide derivative as diclosed in claim 1, wherein the compound of the formula [1] is a compound of the formula [9]:

or an acid addition salt thereof.

- 10. The therapeutic/preventive agent for cognitive dysfunctions according to claim 9, which is a therapeutic agent for senile dementia.
- 11. The therapeutic/preventive agent for cognitive dysfunctions according to any one of claims 2, 4, 6, 8 and 10, which is a therapeutic agent for the Alzheimer type dementia.
- 12. The therapeutic/preventive agent for cognitive dysfunctions according to any one of claims 2, 4, 6, 8 and 10, which is a therapeutic agent for the cerebrovascular dementia.